that all the traffic in the territory thus delimited would, under the law of least resistance, seek the new route. The application of this principle to Fayetteville and the Upper Cape Fear would result in the delimitation of a traffic-tributary territory containing two millions of population and supplying six millions of freight tonnage.

*THE THEORY OF THE NORMAL PORT.

The commercial inferiority of North Carolina to her neighbors on the North and South even in the flush times before the war, became an important factor in my quest for arguments in support of the specific case of the Upper Cape Fear. I began to study the map, when suddenly a new principle flashed upon me. It was what may be termed the philosophy of the traffic influence of ports.

The geographical peculiarity of North Carolina is a jutting sea-line, which culminates in the proboscis of Hatteras and recedes thence to the re-entrant angle in which New York lies, on the North, and to the somewhat similar angle in which Savannah lies, on the South. A glance at the map will show that the normal coast line would be a straight line from New York to Savannah.

A normal coast line would mean normal ports, wherever ports might exist along its length. Ports, for the purpose of this demonstration, may be divided into three classes: the normal port; the abnormal or less desirable port; and the ideal port.

It is self-evident that the traffic influence of any port, other things being equal, extends throughout the territory included between lines drawn at right angles across the midway points of air-lines from it to the ports on either side of it.

In the case of the normal port, these right angle lines would remain parallel, and its traffic influence would be precisely that of its neighbors. In the case of the abnormal port, the right-angle lines would converge, and its traffic influence would be less than that of its neighbors, and in degree proportionate to the rapidity of the convergence. In the case of the ideal port, the right-angle lines would diverge, and its traffic influence would exceed that of its neighbors, and in degree proportionate to the rapidity of the divergence.

Apply these self-evident rules to New York—where the traffic antennae spread out like the ribs of a fan—and the cause of the

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*Compiler's note. See, also, the printed proceedings of the National Rivers and Harbors Congress for 1907, which gives the text of the paper read before that body by Major Hale. For further description of the Theory of the Normal Port, see page 33 and map on page 39.